1. (Amended) A replica router comprising:

at least one communications interface;

a processor coupled to the at least one communications interface; and

a memory coupled to the processor;

wherein the processor is configured to:

receive a network request for access from a client computer;

calculate a performance metric value for each of at least two server replicas, the value specifying an estimated communication performance between the client computer and a server replica based upon the client computer's location in an internetwork; and

direct the client computer to at least one server replica that is estimated to provide good performance based upon the client computer's location in the internetwork based on the performance metric values of the server replicas as calculated by the replica router.

2. (Amended) The replica router of claim 1 wherein the processor is further configured to:

receive advertisements from the server replica, the advertisements containing information from which the replica router calculates the performance metric value; and

maintain a database of the server replica advertisements.

3. (Amended) The replica router of claim 2 wherein the processor is further configured to:

match the replica advertisements to their actual source IP address where each of the replica advertisements contain the actual source IP address of the server replica; and

determine whether any of the server replicas are located behind firewalls.

4. (Amended) The replica router of claim 1 wherein the processor is further configured to:

receive a description of a client computer's network environment; and

calculate the performance metric value for a server replica based upon the description of the client computer's network environment.

5. (Amended) The replica router of claim 1 wherein the processor is further configured to calculate the performance metric value of a server replica based upon the performance metric value of at least one network router located in a path from the client computer to the replica router.

6. (Amended) The replica router of claim 1 wherein the processor is further configured to receive the network request for access to the server replica from multicasting or broadcasting of the replica routing request over the communications internetwork.

7. (Amended) The replica router of claim 1 wherein the processor is further configured to direct the client computer to a server replica that is estimated to provide good performance based upon the client computer's location in the internetwork by directing the client computer to a replica router lower in a replica router hierarchy.

8. (Amended) The replica router of claim 7 wherein the processor is further configured to cause a replica router advertisement to be sent to a replica router higher in the replica router hierarchy, the replica router advertisement containing information from which the replica router higher in the hierarchy calculates the performance metric value, the replica router higher in the hierarchy being programmed to store the replica router advertisement in the database of advertisements.

9. (Amended) The replica router of claim 8 wherein the replica router higher in the hierarchy is programmed to match the replica router advertisement to its actual source IP address to determine whether the replica router that caused the replica router advertisement to be sent is located behind a firewall.

10. (Amended) For a replication router, a method of replica routing in a communications internetwork comprising the steps of:

receiving a network request from a client computer;

calculating a performance metric value for each of at least two server replicas, the value specifying an estimated communication performance between the client computer and the server replica based upon the client computer's location in an internetwork;

directing the client computer to at least one server replica that is estimated to provide good performance based upon the client computer's location in the internetwork based on the performance metric values of the server replicas as calculated by the replica router.

11. (Amended) The method of claim 10 further comprising the steps of:

receiving advertisements from the server replicas, the advertisements containing information from which the replica router calculates the performance metric values; and

maintaining a database of the server replica advertisements.

12. (Amended) The method of claim 11 further comprising the steps of:

matching the replica advertisements to their actual source IP address where each of the replica advertisements contain the actual source IP address of the server replica; and

determining whether any of the server replicas are located behind firewalls.

13. (Amended) The method of claim 10 further comprising the steps of:

receive a description of a client computer's network environment; and

calculating the performance metric value for a server replica based upon the description of the client computer's network environment.

14. (Amended) The method of claim 10 further comprising the step of calculating the performance metric value of a server replica based upon the performance metric value of at least one network router located in a path from the client computer to the replica router.

15. (Amended) The method of claim 10 further comprising the step of receiving the network request for access to the server replica from multicasting or broadcasting of the replica routing request over the communications internetwork.

16. (Amended) The method of claim 10 further comprising the step of directing the client computer to a server replica that is estimated to provide good performance based upon the client computer's location in the internetwork by directing the client computer to a replica router lower in a replica router hierarchy.

17. (Amended) The method of claim 16 further comprising the step of causing a replica router advertisement to be sent from the replica router to a replica router higher in the replica router hierarchy, the replica router advertisement containing information from which the replica router higher in the hierarchy calculates the performance metric value, the replica router higher in the hierarchy storing the replica router advertisement in the database of advertisements.

19. (Amended) An internetwork replica router comprising:

at least one communications interface;

a processor coupled to the at least one communications interface; and

a memory coupled to the processor;

wherein the processor is configured to:

receive replica advertisements, each of the advertisements containing at least one identifier of a network in the internetwork to be serviced by at least one server replica;

maintain a database of the server replica advertisements;

receive network requests from a client computer; and

direct the client computer to one of the at least one server replicas based upon the relationship between the networks identified in the advertisements in the database and a network in which the client computer is located.

20. (Amended) For a replication router, a method of replica routing in a communication internetwork comprising the steps of:

receiving replica advertisements, each of the advertisements containing at least one identifier of a network in the internetwork to be serviced by at least one server replica;

maintaining a database of the server replica advertisements;

receiving network requests from a client computer; and

directing the client computer to at least one server replica based upon the relationship between the networks identified in the advertisements in the database and a network in which the client computer is located.

Also prior to examination of this application, please add the following new claims:

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21. (New) A computer program product having a computer-readable medium including computer program logic stored thereon that, when performed on a computer, causes the computer to:

receive a network request from a client computer;

calculate a performance metric value for each of at least two server replicas, the value specifying an estimated communication performance between the client computer and the server replica based upon the client computer's location in an internetwork;

direct the client computer to at least one server replica that is estimated to provide good performance based upon the client computer's location in the internetwork based on the performance metric values of the server replicas as calculated by the replica router.

22. (New) A computer program product having a computer-readable medium including computer program logic stored thereon that, when performed on a computer, causes the computer to:

receive replica advertisements, each of the advertisements containing at least one identifier of a network in the internetwork to be serviced by at least one server replica;

maintain a database of the server replica advertisements;

receive network requests from a client computer; and

direct the client computer to at least one server replica based upon the relationship between the networks identified in the advertisements in the database and a network in which the client computer is located.

23. (New) A replica router comprising:

at least one communications interface;

a processor coupled to the at least one communications interface; and

a memory coupled to the processor;

wherein the processor includes:

a means for receiving a network request for access from a client computer;

a means for calculating a performance metric value for each of at least two server replicas, the value specifying an estimated communication